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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,698	09/12/2003	Tsutomu Ohishi	242743US2	7671

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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YALEW, FIKREMARIAM A

ART UNIT	PAPER NUMBER
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2136

NOTIFICATION DATE	DELIVERY MODE
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05/28/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/660,698	<b>Applicant(s)</b> OHISHI ET AL.	
	<b>Examiner</b> Fikremariam Yalew	<b>Art Unit</b> 2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 and 38-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36, 38-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/25/2008 has been entered.
2. Claims 1-36 and 38-50 are pending. Claim 37 were previously canceled.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8,10-11,14-22,24-25,28-36,39-48,50 are rejected under 35 U.S.C. 103 unpatentable over Makitni (JP 10-190930(Pub date 21/07/1998) in view of Hewett et al(hereinafter referred as Hewett) US Pub No 20020104023 .

3. As per claims 1 and 15: Makitni teaches an image forming apparatus/method in which a plurality of applications can be installed, the image forming apparatus comprising:

user information input part for a user to input user information and user authentication information(0007);an external server communication part, which receives pre-registered user

authentication information from an external server through the network(0006-0007,0041); one or more authentication parts, which authentication the user authentication information based on the received pre-registered user authentication information(0053,0062-0064); a use control part for receiving one or more authentication results from one or more authentication parts, and controlling use restriction for one or more applications according to the received one or more authentication results(0038,0053).

Makitni does not explicitly teach wherein the external server stores the pre-registered user authentication information independently the apparatus at a separate location on the internet. However Hewett teaches wherein the external server stores the pre-registered user authentication information independently the apparatus at a separate location on the internet (See 0022,0067 and Fig 4 step 205). Therefore it would have been obvious to one ordinary skill in the art that time the invention was made to modify the teaching method of Hewett within Makitni in order to enhance the security of the system.

6. As per claim 2 and 16: the combination of Makitni and Hewett teach the image forming apparatus wherein the use control part refers to information indicating the one or more authentication parts that correspond to an application, causes the one or more authentication parts to perform authentication process when the application is used, and sends an authentication result to the application (See Makitni 0038,0062-0064).

7. As per claim 3 and 17: the combination of Makitni and Hewett teach the image forming apparatus wherein the use control part refers to information indicating the one or more applications that correspond to an authentication part, and sends an authentication result of the authentication part to an application in the one or more applications when the application is used

(See Makitni 0053,0062-0064).

8. As per claim 4 and 18: the combination of Makitni and Hewett teach the image forming apparatus wherein the use control part includes a part for controlling use restriction for a function of the application (See Makitni 0038,0053).

9. As per claim 5 and 19: the combination of Makitni and Hewett teach the image forming apparatus as claimed wherein the use control part sends an authentication result indicating success of authentication to the one or more applications only when authentication by all of the one or more authentication parts succeeds (See Makitni 0053,0062-0064).

10. As per claim 6 and 20: the combination of Makitni and Hewett teach the image forming apparatus as claimed wherein the use control part sends an authentication result indicating success of authentication to the one or more applications when authentication by at least one authentication part in the one or more authentication parts succeeds (See Makitni 0062-0064).

11. As per claim 7 and 21: the combination of Makitni and Hewett teach the image forming apparatus wherein the each of the one or more authentication part is an application or an apparatus connected to the image forming apparatus (See Makitni 0006).

12. As per claim 8 and 22: combination of Makitni and Hewett teach the image forming apparatus wherein the pre-registered user authentication information is registered beforehand in external server (See Makitni 0053,0062-0064).

13. As per claim 10 and 24: the combination of Makitni and Hewett teach the image forming apparatus the image forming apparatus further comprising hardware resources used for image forming processes, and control services that perform processes of a system side including control of the hardware resources, wherein the image forming apparatus is configured to install a

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plurality of applications separately from the control services, and the image forming apparatus includes the use control part as a control service(See Makitni 0030,0036).

14. As per claim 11 and 25: the combination of Makitni and Hewett teach the image forming apparatus wherein the user information input part is configured for a user to input user identification information and user authentication information to be pre-registered in external server (See 0006); the external server communication part sends the user identification information and user authentication information to be pre-registered in the external server input by the user to the external server (See 0006-007, 0041); and the authentication part determines whether the pre-registered user authentication information received from the external server is same as the user authentication information input by the user, and sending an authentication result to the use control part( See Makitni 0041,0053).

15. As per claims 14 and 28: the combination of Makitni and Hewett teach the image forming apparatus as wherein the external server is a Lightweight Directory Access Protocol (See Makitni 0134-0135).

15. As per claim 29: Makitni teaches an image forming apparatus in which a plurality of applications can be installed, the image forming apparatus comprising:  
user information input part for a user to input user information and user authentication information(0007);an external server communication part, which receives pre-registered user authentication information from an external server through the network(0006-0007,0041); one or more authentication parts, which authentication the user authentication information based on the received pre-registered user authentication information(0053,0062-0064); a display part for displaying a screen, on an operation panel of the image forming apparatus, for selecting one or

more applications for the authentication part, in which user authentication by the authentication part is applied to use of the one or more applications (See 0030,0036-0037); and a use control part for receiving an authentication result from the authentication part, and controlling use restriction for the one or more applications according to the authentication result(See 0038,0053).

Makitni does not explicitly teach wherein the external server stores the pre-registered user authentication information independently the apparatus at a separate location on the internet. However Hewett teaches wherein the external server stores the pre-registered user authentication information independently the apparatus at a separate location on the internet (See 0022,0067 and Fig 4 step 205). Therefore it would have been obvious to one ordinary skill in the art that time the invention was made to modify the teaching method of Hewett within Makitni in order to enhance the security of the system

16. As per claim 30: the combination of Makitni and Hewett teach the image forming apparatus wherein information input from the screen is stored in the image forming apparatus as information indicating the one or more applications corresponding to the authentication part (See Makitni 0036-0037).

17. As per claim 31: the combination of Makitni and Hewett teach the image forming apparatus as claimed in wherein the display part displays a screen for selecting one or more functions of an application to which user authentication by the authentication part is applied (See Makitni 0030,0036).

18. As per claim 32: Makitni teaches an image forming apparatus in which is to be connected to a network and in which a plurality of applications can be installed, the image forming

apparatus comprising: user information input part for a user to input user information and user authentication information (0007); an external server communication part, which receives pre-registered user authentication information from an external server through the network (0006-0007,0041); one or more authentication parts, which authentication the user authentication information based on the received pre-registered user authentication information (0053,0062-0064); and a display part for displaying a screen, on an operation panel of the image forming apparatus, for selecting one or more authentication parts for an application, in which user authentication by the one or more authentication parts can be applied to use of the application (See 0053,0062-0064); and a use control part for receiving one or more authentication results from the one or more authentication parts, and controlling use restriction for the application according to the one or more authentication results (See 0038,0053).

Makitni does not explicitly teach wherein the external server stores the pre-registered user authentication information independently the apparatus at a separate location on the internet. However Hewett teaches wherein the external server stores the pre-registered user authentication information independently the apparatus at a separate location on the internet (See 0022,0067 and Fig 4 step 205). Therefore it would have been obvious to one ordinary skill in the art that time the invention was made to modify the teaching method of Hewett within Makitni in order to enhance the security of the system

19. As per claim 33: the combination of Makitni and Hewett teach the image forming apparatus wherein information input from the screen is stored in the image forming apparatus as information indicating the one or more authentication parts corresponding to the application (See Makitni 0030,0036-0038).



20. As per claim 34: the combination of Makitni and Hewett teach the image forming apparatus wherein the display part displays a screen for setting relationship among the one or more authentication parts (See Makitni 0030,0036-0038).

21. As per claim 35: the combination of Makitni and Hewett teach the image forming apparatus wherein the display part displays a screen for setting information indicating that user authentication for use of the application succeeds only if authentication by all of the one or more authentication parts succeeds (See Makitni 0053,0062-0064).

22. As per claim 36: the combination of Makitni and Hewett teach the image forming apparatus wherein the display part displays a screen for setting information indicating that user authentication for use of the application succeeds if authentication by at least one of the one or more authentication parts succeeds (See Makitni 0030,0053,0062-0064).

23. As per claim 39: Makitni teaches the image forming apparatus the image forming apparatus further comprising hardware resources used for image forming processes, and control services that perform processes of the system side including control of the hardware resources, wherein the image forming apparatus is configured so as to be able to install a plurality of applications separately from the control services, and the image forming apparatus includes the use control part and the display part as a control service(See Makitni 0030,0041,0053).

26. As per claim 40: Makitni teaches a use control method for an application in an image forming apparatus which is connected to a network and in which a plurality of applications can be installed, the use control method comprising: receiving a user information and user authentication information input by a user (0006-0007); receiving pre-registered user authentication information from an external server through the network (0006-0007,0041);

displaying a screen for selecting one or more applications for an authentication part, in which user authentication by the authentication part is applied to use of the one or more applications (See 0053,0062-0064); authenticating the user authentication information based on the pre-registered user authentication information by the authentication part(0053,0062-0064); receiving an authentication result and controlling use restriction for the one or more applications according to the authentication result(See 0038,0053).

Makitni does not explicitly teach wherein the external server stores the pre-registered user authentication information independently the apparatus at a separate location on the internet. However Hewett teaches wherein the external server stores the pre-registered user authentication information independently the apparatus at a separate location on the internet (See 0022,0067 and Fig 4 step 205). Therefore it would have been obvious to one ordinary skill in the art that time the invention was made to modify the teaching method of Hewett within Makitni in order to enhance the security of the system.

27. As per claim 41: the combination of Makitni and Hewett teach the use control method further comprising: storing information input from the screen in the image forming apparatus as information indicating the one or more applications corresponding to the authentication part (See Makitni 0036,0053).

28. As per claim 42: the combination of Makitni and Hewett teach the use control method further comprising displaying a screen for selecting one or more functions of an application to which user authentication by the authentication part is applied (See Makitni 0030,0036,0062-0064).

29. As per claim 43: Makitni teaches a use control method for an application in an image forming apparatus which is connected to a network and in which a plurality of applications can be installed, the use control method comprising: receiving a user information and user authentication information input by a user (0006-0007); receiving pre-registered user authentication information from an external server through the network (0006-0007,0041); displaying a screen for selecting one or more authentication parts for an application, in which user authentication by the one or more authentication parts is applied to use of the application (See 0030,0036-0037); authenticating the user authentication information based on the pre-registered user authentication information by the authentication part(0053,0062-0064); receiving one or more authentication results from the one or more authentication parts, and controlling use restriction for the application according to the one or more authentication results(See 0038,0053).

Makitni does not explicitly teach wherein the external server stores the pre-registered user authentication information independently the apparatus at a separate location on the internet. However Hewett teaches wherein the external server stores the pre-registered user authentication information independently the apparatus at a separate location on the internet(See 0022,0067 and Fig 4 step 205).Therefore it would have been obvious to one ordinary skill in the art that time the invention was made to modify the teaching method of Hewett within Makitni in order to enhance the security of the system

30. As per claim 44: the combination of Makitni and Hewett teach the use control method further comprising: storing information input from the screen in the image forming apparatus as

information indicating the one or more authentication parts corresponding to the application (See Makitni 0053,0062-0064).

31. As per claim 45: the combination of Makitni and Hewett teach the use control method further comprising displaying a screen for setting relationship among the one or more authentication parts (See Makitni 0030,0036).

32. As per claim 46: the combination of Makitni and Hewett teach the use control method further comprising: displaying a screen for setting information indicating that user authentication for use of the application succeeds only when authentication by all of the one or more authentication parts succeeds (See Makitni 0053, 0062-0064).

33. As per claim 47: the combination of Makitni and Hewett teach the use control method further comprising displaying a screen for setting information indicating that user authentication for use of the application succeeds when authentication by at least one of the one or more authentication parts succeeds (See Makitni 0053, 0062-0064).

34. As per claim 48: the combination of Makitni and Hewett teach the use control method wherein the pre-registered in the external server (See Makitni 0006-0007).

35. As per claim 50: the combination of Makitni and Hewett teach the use control method the image forming apparatus further comprising: installing a plurality of applications separately from control services that perform processes of a system side, wherein the control services receives the one or more authentication results and controls use restriction for the one or more applications according to the received one or more authentication results (See Makitni 0030,0036-0038,0053)

36. **Claim 9, 12-13,23,26-27,38,49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makitni (JP 10-190930(Pub date 21/07/1998) in view of Hewett et al(hereinafter referred as Hewett) US Pub No 20020104023 and further in view of Ginter et al(hereinafter referred as Ginter) US Pub No 2006/0224903 A1**

37. As per claim 9,23,38: the combination of Makitni and Hewett teach claims 1,15,29 as recited above. The combination of Makitni and Hewett do not teach the image forming apparatus wherein the authentication part performs authentication by using billing information input by a user and available billing information registered beforehand.

However Ginter teaches teach the image forming apparatus wherein the authentication part performs authentication by using billing information input by a user and available billing information registered beforehand (0954,0956).

Therefore it would have been obvious to one ordinary skill in the art at that time the invention was made to modify the teaching method of Ginter within the combination of Makitni and Hewett inorder to enhance the security of the system.

38. As per claim 12 and 26:Makitni teaches claims 1 and 15 as recite above. Makitni and Hewett do not explicitly teach the image forming apparatus further comprising: a user information receiving part for receiving, from a client terminal, user identification information and first billing information indicating usage of the image forming apparatus by a user to be pre-registered in the external server, wherein the external server communication part sends the user identification information and the billing information to be pre-registered in the external server to the external server and receives the billing information pre-registered in the external server and corresponding to the user information input by the user, from the external server, and the

authentication part compares billing information input by a user with the pre-registered billing information received from the external server, and sends a comparing result to the use control part.

However Ginter teaches the image forming apparatus further comprising: a user information receiving part for receiving, from a client terminal, user identification information and first billing information indicating usage of the image forming apparatus by a user to be pre-registered in the external server, wherein the external server communication part sends the user identification information and the billing information to be pre-registered in the external server to the external server (See 1328,1393 ) and receives the billing information pre-registered in the external server and corresponding to the user information input by the user, from the external server, and the authentication part compares billing information input by a user with the pre-registered billing information received from the external server, and sends a comparing result to the use control part(See 0954 1104,1200).

Therefore it would have been obvious to one ordinary skill in the art at that time the invention was made to modify the teaching method of Ginter within the combination of Makitni and Hewett inorder to enhance security of the system.

39. As per claims 13 and 27: the combination of Makitni and Hewett teach claims 1 and 15 as recited above. Makitni and Hewett do not explicitly teach the image forming apparatus wherein the client terminal reads the user identification information and the billing information to be pre-registered in the external server from an external recording medium.

However Ginter teaches the image forming apparatus wherein the client terminal reads the user identification information and the billing information from an external recording medium.

Therefore it would have been obvious to one ordinary skill in the art at that time the invention was made to modify the teaching method of Ginter within the combination of Makitni and Hewett in order to enhance security of the system.

40. As per claim 49: the combination of Makitni and Hewett teach claim 40 as recited above. The combination of Makitni and Hewett do not explicitly teach the use control method wherein the user authentication information includes billing information and pre-registered user authentication information includes available billing information.

However Ginter teaches the use control method wherein the user authentication information includes billing information and pre-registered user authentication information includes available billing information (See 0954 1104,1200 ).

Therefore it would have been obvious to one ordinary skill in the art at that time the invention was made to modify the teaching method of Ginter within the combination of Makitni and Hewett in order to enhance security of the system.

### ***Conclusion***

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fikremariam Yalew whose telephone number is 5712723852. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moazzami Nasser can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fikremariam Yalew  
05/15/2008  
FA

Art Unit 2136

/Nasser G Moazzami/

Supervisory Patent Examiner, Art Unit 2136